

(No Model.)

J. M. DODGE.

DIE STOCK.

No. 301,101.

Patented July 1, 1884.

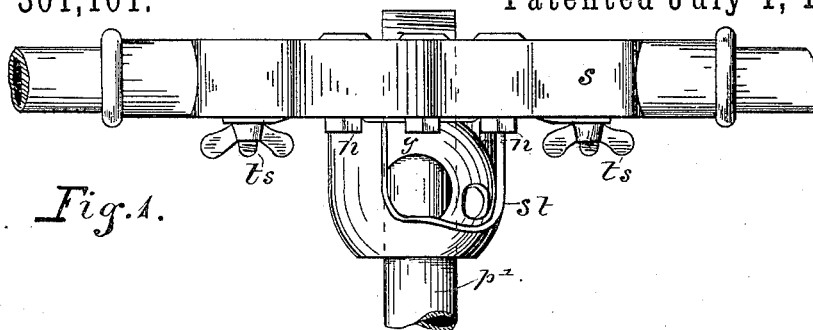


Fig. 1.

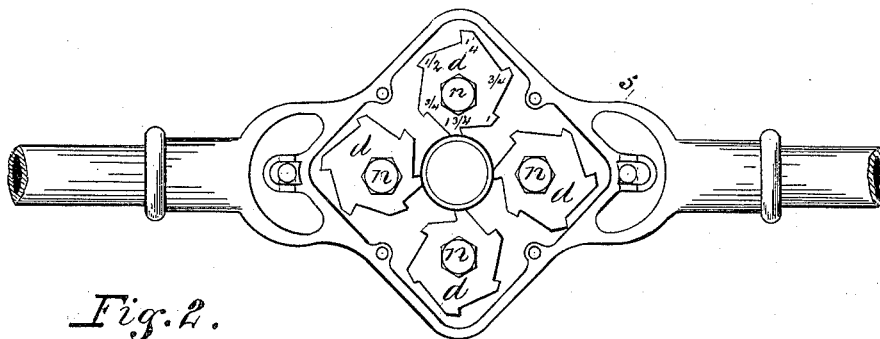


Fig. 2.

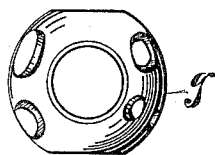


Fig. 3.

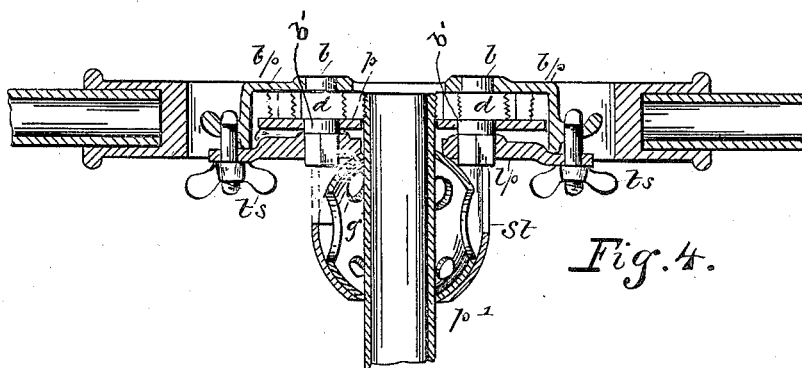


Fig. 4.

WITNESSES.

Jacob W. Soeper  
W. B. Smith

INVENTOR.

James M. Dodge  
By C. F. Jacobs  
Atty.

# UNITED STATES PATENT OFFICE.

JAMES M. DODGE, OF INDIANAPOLIS, INDIANA.

## DIE-STOCK.

SPECIFICATION forming part of Letters Patent No. 301,101, dated July 1, 1884.

Application filed November 22, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. DODGE, a resident of Indianapolis, Marion county, Indiana, have made certain new and useful Improvements in Die-Stocks, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of which like letters indicate like parts.

My invention belongs to that class of devices which are used for cutting threads upon iron pipe, and is designed to furnish in one machine all parts sufficient for cutting threads on pipes of different sizes, and providing for changes without requiring separate pieces to be carried about by the workman.

In the drawings, Figure 1 represents a side view of my device; Fig. 2, a plan view of the interior of the stock and dies only. Fig. 3 is a side view of the guide. Fig. 4 is a vertical section of the device with a pipe in the dies.

In detail, *s* is the stock, in which are dies *d*, having a number of projecting or cutting edges of different lengths. These dies have journals formed on the lower ends, which are supported in bearings *b* or the round openings formed in the bottom plate, *bp*, of the stock, and bearings *b'* or round openings formed in the inner plate, *p*, which is supported on lugs formed in the four corners or sides of the stock *s*. Above the bearings *b'* the die stem or axis extends upward, and has knobs or projections *n* formed on its top, these knobs being regular prisms having sides corresponding in number to the cutting-edges of the dies, and adapted to fit into openings of corresponding shape and size in the lock-plate *lp*, which fits down into the top of the stock, and is held in place by thumb-screws *ts* at each end. The pipe *p'* passes freely through openings in the lock-plate *lp* and inner plate, *p*, to the dies *d*. On top of the lock-plate *lp* is a cup-shaped socket, into which is fitted loosely the guide *g*, which is hollow, having as many sides as there are cutting-edges to the dies, and openings of corresponding size on each of two opposite sides, and these openings are graduated to fit different sizes of pipe. Thus in the one shown in the drawings there are seven sets of opposite sides, and seven sizes of openings adapted for different sizes of pipe. This guide

may be made in a variety of shapes, the socket being made to correspond with it. Thus a cube may be used, and this could be used for three sizes of openings to admit three sizes of pipes. The strap *st* is passed over the guide and screwed fast simply to hold the guide *g* in place. By raising the strap the guide *g* may be readily turned around, so that either opening may be placed in line with the opening in the lock-plate, through which the pipe passes.

The dies *d* may be readily adjusted by removing the lock-plate and turning them around, by hand or other means, in their bearings, so that any one of the cutting-edges may be brought to the front and against the line of the pipe's direction. Of course, whatever number of dies be used—two, three, or four—they must all present the corresponding cutters at the same time. For convenience, these may be stamped with figures corresponding to each other on the top of each of the projections. After the dies are properly arranged the lock-plate is replaced, screwed fast, the guide *g* set in its socket, the strap fastened over it, the pipe end inserted in the proper opening in the guide, and fed onward to the dies, and the stock revolved by its handles. My device thus always has in itself the parts needful for threading pipes of several different sizes, and is cheap and efficient.

What I claim, and desire to secure by Letters Patent, is the following:

1. The stock *s*, the dies *d*, inner plate, *p*, lock-plate *lp*, base-plate *bp*, and knobs *n*, all combined substantially as and for the purpose described.
2. The stock *s*, dies *d*, having knobs *n*, inner plate, *p*, base-plate *bp*, lock-plate *lp*, and movable guide *g*, all combined substantially as and for the purpose described.
3. The multiple-faced movable guide *g*, in combination with a die-stock and means for securing the guide in place in the stock, substantially as described.

In witness whereof I have hereunto set my hand this 14th day of November, 1883.

JAMES M. DODGE.

Witnesses:

C. P. JACOBS,  
N. W. OTT.